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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,010	07/21/2006	Daisuke Kumaki	0553-0506	9347
24628 7590 12/08/2010 Husch Blackwell Sanders, LLP Husch Blackwell Sanders LLP Welsh & Katz 120 S RIVERSIDE PLAZA 22ND FLOOR CHICAGO, IL 60606				
EXAMINER				
GARRETT, DAWN L				
ART UNIT		PAPER NUMBER		
1786				
MAIL DATE		DELIVERY MODE		
12/08/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/587,010

**Applicant(s)**

KUMAKI ET AL.

**Examiner**

Dawn Garrett

**Art Unit**

1786

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 September 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-9 is/are allowed.
- 6) ☒ Claim(s) 1-3, 10-16 and 19 is/are rejected.
- 7) ☒ Claim(s) 17-19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 June 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB06)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notes of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. This Office action is responsive to the amendment received September 16, 2010. Claims 1, 4, 5, 8, and 10 were amended. Claims 17-19 were added. Claims 1-19 are pending.
2. The previous rejection of claims 1-3 under 35 U.S.C. 102(b) as being anticipated by Liao et al. (US 6,717,358 B1); claims 1-3 under 35 U.S.C. 102(a) as being anticipated by Matsumoto et al. (US 2005/0098207 A1); claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liao et al. (US 6,717,358 B1) in view of Thompson et al. (US 6,150,043); and claims 11 and 12 are rejected under 35 U.S.C. 102(a) as being anticipated by Matsumoto et al. (US 2005/0098207 A1) in view of Thompson et al. (US 6,150,043) as set forth in the Office action mailed 12/23/2009 are withdrawn.
3. The rejection of claims 4-6, 8-9, 11 and 12 under 35 U.S.C. 112, second paragraph, as set forth in the last Office action mailed June 23, 2010 is withdrawn due to the amendment.

### ***Claim Objections***

4. Claims 17-19 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claims 17-19 fail to further limit claims 4, 5, and 9 respectively, because the limitations are outside the scope of claims 4, 5, and 9. Claims 4, 5, and 9 are directed to compounds where

R groups are only either hydrogen or alkyl groups. R groups bonded to form rings as recited by claims 17-19 are outside the scope of compounds comprising hydrogen or individual alkyl R groups as recited in the parent claims.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 19 depends upon claim 9, which depends upon claims 7 or 8. Claim 7 does not recite any R groups whereas claim 19 is directed to a limitation regarding R groups. Accordingly, it is not understood how the materials of parent claim 7 are intended to be limited by claim 19. The examiner notes that it appears claim 19 may have been intended to depend upon claim 8 rather than upon claim 9. Clarification and/or correction is required.

### ***Double Patenting***

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re*

*Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-3 and 11-16 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 4, 5, 7, 8, 10, 11, 17, 18, 20, 21, 23, 24, 26, and 27 of U.S. Patent No. 7,564,052. Although the conflicting claims are not identical, they are not patentably distinct from each other because although the wording is not identical and '052 specifies "TPAQn" as a first layer material, '052 claims a first, second, and third layer for a light emitting element comprising material within the limitations of instant claims 1-3, 11 and 12.

9. Claims 1-3, 11-16 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3, 5, 7, 11, and 12 of U.S. Patent No. 7,598,670. Although the conflicting claims are not identical, they are not patentably distinct from each other because although the claim wording is not identical, the layers disclosed by '670 for a device structure comprise materials meeting the requirements for the materials of the layers of the instant claims.

10. Claims 1-3 and 10-16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 5, 6, 7, 14, 15, 21 of copending Application No. 10/582,249. Although the conflicting claims are not identical, they

are not patentably distinct from each other because although the claim wording is not identical, the specific materials claimed for the first, second and third layers by '249 meet the requirements for materials of the layers of the instant claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented. (Note: A Notice of Allowance was mailed in this application on 10/14/2010, but the patent has not issued yet.)

11. Claims 1-3 and 11-16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-40 of Application No. 10/577,472, which has now issued as Patent No. 7,750,560. Although the conflicting claims are not identical, they are not patentably distinct from each other because although the claim wording is not identical, the materials claimed for the first, second and third layers of a light emitting device structure claimed by '479 meet the requirements for materials of the layers of the instant claims.

***Allowable Subject Matter***

12. Claims 4-9 are allowed. The remaining claims comprise allowable subject matter in terms of the prior art, but are rejected or objected to on other grounds in this Office action. The prior art fails to teach or to render obvious first and second layers as recited in combination with the other recited features of a light emitting device.

***Response to Arguments***

13. Applicant's arguments filed September 16, 2010 have been fully considered but they are not persuasive.

Applicant argues with respect to the double patenting rejection over US 7,564,052 that there is no double patenting between the application and '052, because they have the same priority dates. This argument is not persuasive for an obviousness double patenting rejection, because obviousness double patenting rejections are intended to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. Furthermore, the present application and '052 are not within the same patent family and are not divisional applications. The examiner maintains the obviousness double patenting rejection over '052 is proper.

With respect to the obviousness double patenting rejection over US 7,598,670, applicant argues the '670 patent does not disclose any specifics regarding the relative values of electrons or hole mobilities. In response the examiner submits '670 clearly recites material that fully transports electrons and recites an aryl amine, which the same material as used by the present application as a hole transporting property material (see instant specification page 13 and page 22, lines 13-25). A material recited as being an electron transporting material is considered to be fully electron transporting and therefore have a ratio of 100 or less (which includes zero) of an electron transporting property.

Regarding the obviousness double patenting rejection over 10/582,249, applicant's arguments of superior results is not persuasive to overcome an obviousness double patenting rejection. Additionally, the specific materials discussed by applicant are only in the dependent

claims of '249. '249 clearly recites material that fully transports electrons and fully transports holes (see '249 claim 2). A material recited as being an electron transporting material is considered to be fully electron transporting and therefore have a ratio of 100 or less (which includes zero) of an electron transporting property. A material recited as being an hole transporting material is considered to be fully hole transporting and therefore have a ratio of 100 or less (which includes zero) of a hole transporting property.

Regarding the obviousness double patenting rejection over 10/577,472 (now US Patent No. 7,750,560), applicant argues the '670 patent does not disclose any specifics regarding the relative values of electrons or hole mobilities. In response the examiner submits, '670 clearly recites material that is electron transporting and a material that is hole transporting (see '670 claims 2 and 4). A material recited as being an electron transporting material is considered to be fully electron transporting and therefore have a ratio of 100 or less (which includes zero) of an electron transporting property. A material recited as being an hole transporting material is considered to be fully hole transporting and therefore have a ratio of 100 or less (which includes zero) of a hole transporting property. Applicant further argues '560 comprises additional layers that are different from the present claims. The examiner submits '560 recites layers as required by the present claims. The present claims do not specifically *exclude* other layers from being present.



***Conclusion***

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dawn Garrett whose telephone number is (571) 272-1523. The examiner can normally be reached Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on (571) 272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dawn Garrett/  
Primary Examiner, Art Unit 1786

December 4, 2010